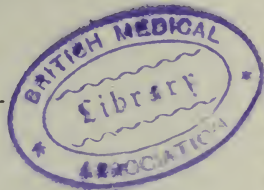


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Heath Town District Council.



Annual Report,

OF

Medical Officer of Health

J. ALFRED CODD, M.D., B.Sc.,

FOR THE YEAR 1904.

HEATH TOWN :

PRINTED BY F. SIDEBOTHAM, WOLVERHAMPTON ROAD.

Annual Report.

YOUR Council has suffered a great loss during the year by the death of Dr. Green, who has for so many years acted as your Medical Officer.

You have done me the honour to appoint me as his successor and it shall be my earnest endeavour to merit the confidence thus placed in me.

My duties began on the 1st of September, and during the interregnum following Dr. Green's illness, the duties of the office were undertaken by Dr. Turton.

I have endeavoured to secure any memoranda left by Dr. Green relating to work done, but have not found any; and I believe that no inspections or similar work were done during the year up to the time of his illness, so that there is nothing to record up to the time of my taking up the duties, except Dr. Turton's report upon an offensive trade mentioned hereafter. The births and deaths returns up to August were supplied by the Registrar, and the notifications of Infectious Diseases by the Inspector.

Owing to the nature of Dr. Green's illness he was unable to hand down to Dr. Turton any traditions of the past sanitary history of the district, and as I have only been able to obtain reports for the years 1903, 1902, 1901, and 1895, I am not in a position to describe the past sanitary history of the district in more than general terms.

The same absence of information prevents any attempt at continuity, which therefore I shall not attempt, but shall simply begin again upon lines which I have carefully thought out.

I have endeavoured to crowd into four months as much activity as possible, but cannot pretend for it to represent a year's work.

At the end of my report I shall include Tables I., III., and IV., as required by the Local Government Board. Table II. is only used where there are separate "localities" of known population, of which there are none in your district.

Table I. has not been included by Dr. Green in his reports, but in the Register he has filled it up for 1903, with all the necessary details, so I am able to produce it for this year with all the details for the ten preceding years, just as Dr. Green left it, with the exception noticed later. Table III. he has called Table 3 ; Table IV. he has called Table 2 ; Table V. is the official form of the County Medical Officer of Health for recording the work of the Inspector of Nuisances relating to sanitary matters ; and Table VI. is the official form issued this year for the first time by the Local Government Board for recording Inspections of Factories, Workshops, &c.

Description of District.—This is required by the Local Government Board and the County Council.

The town has an acreage of 738. It is bounded on the north by the Cannock Rural District, on the west by the Wolverhampton County Borough ; on the south by the Wolverhampton County Borough and Willenhall Urban District, with a broad tongue of Bilston Urban District approaching within a few yards of the boundary ; and on the east by Wednesfield Urban District. The population is largely an artisan one, and is grouped together in three centres : Park Village with 786 houses in the north, Heath Town proper with 1,202 houses in the centre, north-east, and east ; and Moseley Village in the south-east. The two former centres, though distinct, are coterminous in places ; but Moseley Village is situated about one mile off, the intervening country being sparsely populated.

Geologically, the district is divided by a fault into two formations. This fault extends as an almost straight line from S.W. to N.E. It may be reproduced on the map by drawing a line from where the Midland Railway crosses over the Grand Junction Line to where the canal runs alongside the Wednesfield Road, continuing it along the straight part of the road, and producing it in both directions to the boundaries. North-west of this line is the lower red sandstone and marl. South-east of it are the coal measures, while just to the south of the loop line bridge over Dean's Road is a small outcrop of greenstone. In the sandstone and marl formation there are many clay-pits and brickworks. In the coal measures the pits are all worked out or abandoned.

In the neighbourhood of the fault there is a watershed separating the basin of the Severn on the north-west from that of the Trent on the south-east. The natural drainage of the former is into the Smestow Brook, an affluent of the Stour ; while the natural drainage of the latter (which escapes percolating into the mines) finds its way into the Tame.

The sanitary history of the Smestow Brook will be dealt with under the heading "sewerage."

Population.—The correct estimation of population is one of the most important duties of the Medical Officer of Health, and this has received a great deal of attention. I should have preferred to have followed the method of Dr. Green, so as to have the rates all uniform, but I cannot say that his method commends itself to my judgment. For four successive years he added 100 to the previous year, then each successive year he added respectively 500, 988, 142, 152. As I cannot understand what his principle was, I feel compelled to start with a new method, that which is regarded as the most accurate, namely, the assumption of a uniform rate of geometrical progression between the census of 1901 and 1910, equivalent to the rate of increase which obtained between 1891 and 1901. According to this method the estimation of population at the middle of 1903 should be 10,074; according to the method of multiplying the number of inhabited houses by the average number per house in 1901 it should be 11,443. Dr. Green estimated it at 9,802, which I think is too low. I propose, however, to leave his figures as they stand for the present year, and perhaps it may be wise next year to revise all the estimated populations and the dependent rates, so as to bring them all into uniformity, as recommended by the Local Government Board.

Vital Statistics.—A very disturbing element in the vital statistics of your district is the migration in August, 1903, of the Union Workhouse from Wolverhampton to the land adjacent to the boundary separating Heath Town from Wednesfield. The Workhouse is built so that the male pavilions, the whole of the infirmary, insane, and isolation blocks are in Heath Town; the female pavilions and lying-in wards are in Wednesfield. The master of the workhouse has kindly informed me that the population of the Heath Town portion is 821, and that of Wednesfield 277. The figure 821 bears a very considerable relation to the total population of Heath Town, and as it really belongs mostly to outside districts, it would vitiate statistics to add it all to the estimated population of Heath Town. I have therefore proposed, with the concurrence of the Medical Officers of Health of the other districts of the Union, and of the Registrar General, to allot the entire population of the Workhouse (1098) to all the districts of the Union, in proportion to their population at the last census, thus:

Wolverhampton	..	..	..	669
Bilston	..	..	..	170
Willenhall	..	..	..	131
Heath Town..	..	..	..	68
Wednesfield..	..	..	..	35
Short Heath..	..	..	..	25

The Medical Officers of these districts will add these figures to their estimated populations, with the exception of the Medical Officer of

Wolverhampton, who, while approving of the plan, finds it necessary for cogent reasons to adhere to his present method until the next census.

The mortality at the Workhouse of residents belonging to outside districts far exceeds those of the other deaths in your district. The nett deaths in the district being 172, those of outside residents in the workhouse 205, those of Heath Town residents in the Workhouse 10. It must also be noticed that all births in the Workhouse are registered in Wednesfield district, while several infant deaths occur in the Heath Town part of the Workhouse. I have therefore been compelled to alter the columns of Table I., so as to make columns 5, 6, 7, and 8 refer to the "nett deaths belonging to the district," and columns 12 and 13 to "total deaths registered in the district." With the heavy weighting-down of the true district mortality by the Workhouse deaths, columns 5, 6, 7, and 8 would be quite meaningless as they originally stood in the official tables: column 6 especially so, as no births occur in the Heath Town portion of the Workhouse. As it is, columns 12 and 13 are meaningless, but they are only two useless columns in place of four. The rate in column 13 is on the estimated population outside the Workhouse, plus the total Workhouse population in Heath Town, but this enormous death-rate must not be compared with previous years, or with rates in other localities, because it includes the Workhouse death-rate of a Union having a population at the last census of 154,591.

I have accordingly transferred Dr. Green's figures in columns 7 and 8 to 12 and 13 respectively, and *vice versa*, except those for 1903, where he appears to have made the transference himself.

Infant Death-rate.—This is not so low as the phenomenal rate of last year, but is very little above that of the year before. It is very much below the average for the last ten years. The same remarks apply on all points to the death-rates at all ages. The normal summer of 1904 was far less favourable to both ordinary life and infant life than the abnormal summer of 1903, and slightly less favourable than the abnormal summer of 1902.

Infantile mortality is largely due to ignorance of mothers in the matter of feeding and general management of infants. I have suggested that the Registrars should be supplied with cards containing instructions for feeding infants, with the request that he should give away a copy with each birth certificate. Your Council has sanctioned the arrangement, which I hope will come into force early next year. The results of the same procedure in Leek and Coseley Urban Districts have been very encouraging.

During the year a large and influential deputation waited upon Lord Londonderry, urging the importance of making compulsory the teaching of Hygiene, with special reference to the action of alcohol and narcotics, in all schools. This is the outcome of a per-

sistent propaganda by many of the leaders of the medical profession, and formed the subject of an important discussion at the annual meeting of the British Medical Association at Oxford, at which I was present. The President of the Board of Education, in reply, recognized the importance and necessity of the subject, and regretted that delay would be necessary in putting it into force, but practically promised the deputation that in six years at least their desires would be realized, and meanwhile he encouraged all educational authorities to take immediate steps to have the subject taught in their schools. In the district of Quarry Bank, the subject of Infant Hygiene was taught in 1903 in the upper standard in the girls' schools, and the Medical Officer (Dr. Tibbetts) states 'the headmasters write me that the subject is greatly appreciated by the children themselves, and much interest is manifested.' I earnestly commend the subject to the attention of the Education Authorities in your district. Such instruction could not fail to produce ultimately a definite reduction in infant mortality.

Zymotic Death-rate.—The total deaths are 20, a rate of 1.9 per thousand, consisting of Measles 9, Scarlet Fever 3, Whooping Cough 7, Influenza 1, all except one Measles and the Influenza cases being children under 5. No deaths took place in your Infectious Hospital. It is worthy of note that Measles and Whooping Cough head the list with 9 and 7 respectively, being a rate of .86 and .67 per thousand. It is a misfortune that the public treat these two diseases as trivial, and often never call in a doctor, and allow the cases to go out prematurely, and take no adequate means for isolation and disinfection. These two diseases are the commonest causes of Consumption in children, and many other dangerous results often follow. The greatest care should be taken in isolation and disinfection.

In most of the districts in this and other counties it is the custom of the Education Authority to assist the Medical Officer of Health, by requiring or encouraging elementary school teachers to send to him stamped printed post cards (supplied by the Sanitary Authority) daily or weekly, containing a list of all absent children, with a note of the cause, if known. In this way the Medical Officer is kept thoroughly informed of the nature and extent of epidemics of non-notifiable Infectious disease, and is able to take suitable measures to arrest their spread. When entering upon my duties. I made a formal request to your Educational Authorities that they would arrange for the teachers to send me these weekly returns of absent children. The managers of the voluntary schools promptly acceded to my request, and the returns from the teachers of these schools have been of the utmost value. The managers of the County schools at first acceded to my request, but limited the returns to Infectious cases only. I thereupon specified the Infectious diseases, with regard to which I particularly desired returns, namely, Measles,

Whooping Cough, Pneumonia, Influenza, Diarrhœa, Chicken-pox, Mumps, and German Measles, weekly returns for which the County Medical Officer of Health asks from all Medical Officers in the County; and up to the next meeting of the Attendance Committee, much valuable information was afforded by County school teachers. At their next meeting they rescinded their former resolution, and resolved that only cases of those diseases compulsorily notifiable by law should be reported to me by teachers. This is practically equivalent to refusing my request altogether; thus those cases are unrecorded whose existence practically cannot be recorded in any other way, and a knowledge of which is so necessary for proper supervision of the public health of the district. These returns are made in 23 urban, and 8 rural districts in the County.

I would call the attention of your Council and of your Education Authority to the grave responsibility which attaches to those who thus withhold information which might be so easily afforded, and which would be of such importance to the health of the district, and would especially call your attention to the following extract from a memorandum issued by the Local Government Board, which shows that the importance attached to this matter is not due to any idiosyncrasy of your Medical Officer of Health.

[Extract from Memorandum from the Local Government Board, on the "Closing of Public Elementary Schools, &c.," section 7, paragraph 3.]

The attention of school attendance officers and of schoolmasters should also be drawn to the following considerations. Frequently they themselves will obtain the earliest information of the occurrence of infectious disease among scholars, and it is most desirable that such officer or master should without delay communicate the facts to the Medical Officer of Health. Absence of any child from school on the plea that it is suffering under one of the before-mentioned diseases, and absence of several children of one family from school at the same time, no matter what name be given to the complaint that keeps them at home, should be reported to the health officer. In practice it has been found that this notification of absentees has materially aided the local health officer in taking measures for the suppression of infectious disease, to the advantage alike of the district and of the school. Furthermore, schoolmasters may properly be asked to take note, especially when an epidemic threatens or is present, of symptoms occurring in any of their scholars that may indicate the commencement of disease, febrile in nature. Besides heat of skin, such symptoms are shivering, headache, and languor especially if commencing suddenly, vomiting, rashes on the skin, and sore throat. When scarlet fever or diphtheria is about, every trace of sore throat should be looked upon as suspicious. In any case where such symptoms are observed, the safest course will be to exclude the child from school until assurance can be had that it may attend school without harm to itself or danger to other scholars.

It is not too much to ask the Committee of the Council schools to reconsider their decision in the light of this important memorandum from the Central Authority.

During the later months of the year there was a severe epidemic of whooping cough, which specially affected Holy Trinity Infants School. The question of closing received careful attention, but owing to the proximity of the holidays and other considerations, I decided to take no steps in the matter.

Scarlet Fever.—Since my appointment, 16 cases have been notified, and of these 10 have been removed to the Infectious Hospital. Though we have not been very successful in tracing the sources of infection, no return cases have occurred to my knowledge.

Diphtheria and Enteric Fever.—Since my appointment one of the former and two of the latter have been notified, the two latter being removed to the Wolverhampton General Hospital.

Erysipelas.—All except one of the cases occurred before my appointment, and most of them in the Workhouse. All notifications received from the Workhouse are included in Table III., because there was on my appointment no means of identifying the district from which the patient came. In future, I shall transfer them to their proper district.

Phthisis.—This is an infectious and preventable disease, and its treatment and prevention earnestly commands the attention of Sanitary Authorities. In 1903 an important County meeting was called to consider the advisability of erecting a County Sanatorium at the public expense. In February of 1904, at an important meeting of the Staffordshire Branch of the British Medical Association, held at Stafford, I had the honour to second a resolution proposed by Dr. Aldowie, "That the members of this branch present at this meeting noting with much satisfaction that the County Council are considering the question of providing a sanatorium in the County for cases of Pulmonary Tuberculosis, desire to express their keen appreciation of the need of such an institution, and their hope that a scheme with that object in view will successfully be carried through; they also desire to emphasize the fact that, in their opinion, sites are available in the County, which are in every way suited for the purpose, and that it is desirable that such an institution should be situated in some central locality, as far as possible midway between the populous centres in the north and south." The discussion was adjourned to a subsequent meeting, and finally the resolution was carried by 17 votes to 3.

I have no wish to inflict on you an analysis of my speech on that occasion, but briefly set down the following propositions. The destruction of life and public usefulness of a large and promising section of the community at a time when their career of usefulness is about to begin, or has just begun, is a grave social and economic

question, not merely a humanitarian one. If you rescue the consumptive breadwinner (or prevent him taking the disease) you save his family from pauperism. A large out-patient practice has convinced me that ordinary hospital work will not suffice, that voluntary effort will not succeed unless we have munificence on a princely scale. It can only be done with public money, and the result produced will amply repay the expenditure. The object of this sanatorium is to take in patients for a short time (compared with the stay at ordinary sanatoria), to thoroughly drill them in details of treatment and prevention, and then to send them forth to continue the treatment in their own homes, and to become apostles to spread the doctrines of open-air life, cleanliness, pure living, and care of the sputum. By this means in a few years a large section of the Staffordshire consumptives will have passed through the sanatorium, and a healthy public opinion formed of incalculable value. I urge your Council to take your full share in advancing this most important sanitary and economic procedure.

Another important measure which should receive your careful attention is the voluntary notification of Consumption. This has been practised in many districts with very satisfactory results.

One other procedure, not involving much cost, I would urge should be carried out as soon as possible, the thorough disinfection of all houses where an inmate has died of phthisis.

Isolation and Disinfection.—**INFECTIOUS HOSPITAL.**—This building is a temporary structure, constructed of corrugated iron and matchboarding, situated on pit-bank. It is 450 yards distant from the nearest gas mains, and from the nearest water mains. In wet weather the track, 450 yards long, is indescribable. Water is supplied in carts. The closets are the usual type of small privies, into which the ashes are emptied. In November, the drains were found defective, and were examined. They were found very faulty; the joints had not been cemented, there were several sharp angles with open joints; most of the drains ran uphill, but this was probably due to subsidence, the whole building having dropped at one end for about one foot. The drains had all to be taken up and relaid, properly cemented and jointed, and with a substantial fall.

Now that the joint scheme for small pox has been arranged, this building is used entirely for scarlet fever. It has nearly lasted its natural life, and future provision will have to be considered in the not distant future for scarlet fever, diphtheria, and enteric fever. By far the best plan would be to erect a joint hospital for several of the surrounding districts, having separate pavilions for the three diseases, but as your larger neighbours have already made their

schemes, that cannot be thought of. The only practical alternative is, in the case of scarlet fever, either to make arrangements with Wolverhampton Corporation to take cases into the Borough Fever Hospital, or to erect on another site a permanent building to be used for administration and acute cases, while the present building might be re-erected as an annexe for convalescent cases.

The site must not be a 'made' site, like the present one, and it should be reasonably accessible by a properly made road, and should have a water supply, and gas or electric light, and wash-down water closets draining into the sewer.

The arrangements for the diseases of enteric fever and diphtheria rest on an altogether different basis. Owing to the great cost of administration that obtains in cases of these diseases (as compared with those of scarlet fever), a hospital or detached pavilion for these diseases for your district only is not advised. I advise that definite arrangements be made with Wolverhampton General Hospital for the admission of these cases there, and this should continue as long as the Hospital is willing to receive them. If this arrangement should ever be determined, the only satisfactory solution would be the erection of a large hospital for several combined districts.

Bacteriological Examinations.—I regret that more use has not been made of the facilities provided by the County Council for bacteriological confirmation of Enteric Fever, Diphtheria and Phthisis cases. I hope to make arrangements whereby these examinations may be made with much greater facility than formerly, and hope that practitioners will take full advantage of these methods of attaining greater accuracy and certainty of diagnosis.

Several districts have supplied anti-diphtheritic serum gratuitously to patients suffering from this disease. This is an important matter which should engage your attention, especially its use as a prophylactic among those exposed to infection.

In making returns of infectious diseases, as there are no separate localities of known population in your district, I have not thought it necessary to classify patients as belonging to Heath Town proper, Moseley Village, and Park Village respectively. The Inspector has been provided with a printed enquiry book, with separate headings, including a space for a sketch map showing the position of the infected house. These are sent to me, and transferred to a register with corresponding headings, and at my monthly reports I have indicated by coloured pins the positions of the infected houses. By this means your Council is kept completely informed of the exact localities where the cases occur. I have also kept a register of cases in the Infectious Hospital.

Disinfection.—It is now generally admitted that bedding and thick objects cannot be disinfected by fumigation, and that steam is the only agent for thoroughly penetrating and disinfecting the interior of these thick fabrics. Consequently the necessity should be faced of either providing a steam disinfector or making arrangements with the Wolverhampton authorities for the use of their disinfector. The disinfection of rooms by means of a powerful spray such as Mackenzie's is now regarded as being more efficient and convenient than the use of fumigation.

Insanitary Dwellings.—During the four months, I have made systematic inspection of several streets in all parts of your district, including Bridge Street, Cannock Road, Grove Street, Bond Street, Heath Street, New Street, Prestwood Road, Milton Road, Railway Street, Dean's Road, and Moseley Village east of Dark Street, besides other detached spots. I have reported to you several houses that are unfit for human habitation, and others that have various sanitary defects. Your Council has taken action which has resulted in some cases in the owners putting them into a relatively sanitary condition. Some are beyond repair, and will have to be closed. There are many social and economic difficulties connected with the closing of houses inhabited by the very poor who are unable to pay rent for a really sanitary dwelling. They are receiving earnest consideration by all Sanitary Authorities, and are still far from being solved. It is not wise, however, to allow special circumstances in individual cases to altogether override general sanitary considerations, and the health of the community as a whole. The provision of artisan's dwellings by municipalities and other authorities does not meet practically with the success that theoretically it deserves.

Excrement and Refuse Disposal.—The conservancy system generally prevails. There are a few water-closets, and many slop closets, the exact number of which I cannot ascertain. One or other type is insisted upon in the case of all new houses. Until a few years ago, most closets were of two types : large middens opening into a large ashpit, and exposed to the weather, and privies with very large underground vaults, capable of holding the excretions of a family for a year. Up to September last, as the result of the energy of your late Medical Officer and of your Inspector, they were reduced to about two dozen. Your Council has taken action, and as a result all the former type are being converted into the 'ash closet' type, the privy described in the bye-laws, of limited capacity, with an opening at one side, with a concreted floor, into which the household ashes are put, the ash pits being abolished. The conversion of the other type will be proceeded with as soon as certain preliminaries are settled.

The usual practice of emptying has been to place contents in a wheel-barrow and tip it on the streets. After a large number of closets are emptied in this manner, the cart comes round, and the night-soil on the streets is shovelled in. The carts being of the ordinary contractor's type, leak and further besmire the streets on their way to the tip. The streets are thus fouled, the night soil sinks into the macadam, and in the case of infected stools, becomes a menace for years afterwards. Storm water flowing into Smestow Brook carries away the surface filth, which enters the stream. Dr. Green has frequently and eloquently inveighed against this filthy practice, and I fully agree with all he has said about it. Some years ago, Mr. Bennett, an engineer resident in your district, designed a movable tank or trolley, which your Council purchased, and which is admirably adapted to receive night-soil from the barrows, and when full it can then be shovelled into the collecting cart. It has not been regularly and generally employed; it has the disadvantage of requiring (as in the present system) a second shovelling—the first being from the closet into the barrow, the second from the tank into the cart.

In 1900, the County Medical Officer of Health, reporting on the outbreak of Enteric Fever at Moseley Village, advised "providing a circular detachable galvanized pail, suspended on wheels, which could be tipped by two men directly into the cart."

Your Council arranged for a sub-committee meeting in one of your streets to see the movable tank in operation, and I requested Dr. Reid to come and see it working. The County Medical Officer subsequently sent a Report, embodying his observations, the full text of which I give here :—

Stafford, Nov. 19th, 1904.

Excrement and Refuse Disposal at Heath Town.

Memorandum by County Medical Officer of Health.

In company with Mr. Birtles, member of the Heath Town District Council, Dr. Codd, the Medical Officer of Health, and Mr. Griffiths, Surveyor and Sanitary Inspector, on Nov. 14th I visited Heath Town in order to see in operation a new method of removal of privy contents from houses, the chief feature of which was said to be the avoidance of the fouling of roads.

As requested by Mr. Birtles, I beg to make the following comments upon the system for the information of the District Council.

One must admit that the method of transference to the collecting cart by means of the shallow movable truck is an advance upon the practice of temporarily depositing the refuse upon the road, still the truck does not by any means entirely protect the road from fouling, and in my opinion, it compares unfavourably with other methods which might be adopted.

I am still of opinion, granting that the privy system is to be continued, that the best method of emptying the receptacles is by means of a galvanized iron tub suspended by pivots on a forked arm fixed upon wheels, the size of the tub not to be greater than will permit of its being lifted by two men, by means of handles attached to the side, to allow of the contents being tipped into the cart direct. This probably would necessitate weekly in place of fortnightly collection, but I am satisfied, having regard to the facility with which the work could be done, that the time occupied would not exceed that which the suggested method with fortnightly intervals would entail.

I venture to suggest however, that whatever method is adopted it should be looked upon merely as a temporary expedient until such time as the District Council can see their way to abolish the privy midden system entirely and substitute a water-closet system.

The privy system, no matter how conducted, is a most unwholesome and dangerous one, and it has the additional disadvantage of being very costly compared with water-carriage.

I have no doubt it would pay the District Council to make very substantial contributions towards the cost of converting existing privies into water-closets, if not to defray the entire cost, and the advantage in a public health sense which would thus accrue would be enormous.

This in my opinion is the true solution of the difficulty, and having regard to to what has already been done in that direction in other urban districts in the County, public opinion, I feel satisfied, will, in the near future, compel all Authorities to fall into line. This being the case, and in view of the fact that sewers and sewage disposal works are now available, the question is whether the time has not arrived for the whole policy of excrement removal to be reconsidered. By the substitution of water-closets for privies the removal of dry refuse would prove to be comparatively simple and inexpensive.

GEORGE REID.

At the next meeting of your Committee, I expressed my entire agreement with Dr. Reid's Conclusions, and requested your Council to give your consideration to the two matters contained in the report, viz.: the use of portable pails instead of wheelbarrows, and the encouragement of owners to convert into w.c.'s, by offering to bear part or the whole of the cost, and so relieving yourselves of the deadweight of the cost of night-soil removal, and produced figures to substantiate Dr. Reid's statement. I also advised the use of water tight sanitary tumbler carts. Your Council thereupon appointed a sub-committee to consider the matter.

Sewerage.—Formerly, the sewage mostly found its way into the Smestow Brook. This stream forms the greater part of the western boundary between the district and Wolverhampton. After leaving Heath Town, it forms the boundary between Wolverhampton and Cannock Rural District, and then between Wolverhampton and Tettenhall Urban District, and then flows through the latter district and forms the Compton Pools.

These become loaded with refuse carried down from Heath Town, Wolverhampton, and Bushbury, and have entailed upon the Tettenhall authority periodic cleaning out, part of the cost of which has to be borne by your district.

About five years ago, a new sewerage scheme was inaugurated, and the sewage of Heath Town and Park Village carried to the outfall at Coven Heath, three miles away, where it is disposed of by precipitation tanks and broad irrigation, the final effluent being into a tributary of the Penk. Moseley Village, being on the other side of the watershed already referred to, cannot be connected to the main outfall by gravitation, so that a special outfall has been provided on a site close to the village, where the treatment is tank sedimentation and broad irrigation. Most of the houses have now been connected with the new sewers, the old sewers discharging into the Smestow Brook being used as storm sewers. A mechanical filter bed has, during the year, been provided at Coven Heath to receive the storm water going down the new sewers.

Your Council has purchased some new large-scale ordnance maps upon which it is intended to mark the sewers and drains where known.

I have inspected the whole course of the Smestow Brook where it runs alongside your district, and have reported several sources of pollution to your Council, and steps are being taken to remove some of them. The County Inspector has also inspected its course, and presented the following Report to the County Medical Officer of Health :—

Stafford, Dec. 13, 1904.

*Pollution of head of Smestow Brook, in Heath Town
Urban District.*

“ Dear Sir,

The stream issues by a 2-ft. 0-in. by 2-ft 6-in. oval brick culvert under the Wednesfield Road, fouled by soap suds, etc. The surveyor of Heath Town, Mr. Griffiths asserts that there are only two blocks of premises in his district remaining unconnected to the sewers.

Over this culvert is situate a manure pit, partly in Wolverhampton, and partly in Heath Town, but belonging to premises in Heath Town. It is defectively constructed of loose planks, allows soakage of contents into brook. This was first reported in 1893 on first inspection of the brook, and remains unaltered.

An 18in. brick barrel drain issues into this brook from numbers 41-42, Woden Road. It was until recently the drain of the premises, but owing to their having been connected to the system of sewers it acts now only as a surface water drain. Two pigsties in this yard drain to the brook, but no pigs were kept on date of inspection (8/12/04) but they may be used at any time.

The following are other openings to the brook in Heath Town.

6in. pipe surface drain, 43 Woden Road.

3in. iron pipe, Hadley's Trunk Works, Woden Road, used as a urinal by workmen; although the remainder of the drainage of the premises has been connected to the system of sewers this still remains causing direct pollution, there is also an opening in wall (brick out) yard surface drain and a 2½in. iron pipe roof water from same premises.

46 & 47 Woden Road:—two openings in wall, pigstye drainage, no pigs kept on date of visit; also a 6in. pipe sewage of these two houses, being one of the blocks of premises not yet connected to the system of sewers.

49, Woden Road, overflow of catchpit drainage of pigstye to brook; also 4in. surface drain.

Council Schools, Woden Road, two 4in. and one 2in. pipe, yard surface drains.

An 18in. pipe receives blow off from boilers and roof water at Evan's Foundry, together with road surface drainage. Water slightly greasy.

This stream is now culverted from the junction of the two heads to Nine Elms Lane. The following pipes enter in the open portion.

A 6in. pipe road surface drain	Crowther Street
„ 18in. „ „ „ „	„ Nine Elms Lane
„ 9in. „ „ „ „	„ „
„ 9in. „ „ „ „	„ „
„ 9in. sewer Storm overflow,	Heath Town Sewers.

The stream now becomes the boundary between the Wolverhampton County Borough and Bushbury Cannock Rural District.”

I am, yours obediently,

FRED. T. POULSON,

Rivers Pollution-Sanitary Inspector,
Staffordshire County Council.

It is important to have this detailed and concise report before you (which was furnished to me by Dr. Reid at my request), so that by taking adequate action you may guard against any possible pollution of the stream.

Water.—This is supplied by the Wolverhampton Corporation mains. There were, a few years back, a large number of wells, but most have been abandoned, and town water laid on. I have inspected those that are left, and have instructed the Inspector to send samples for analysis, and in most cases the water has been found unfit for human consumption. The wells have been ordered to be closed and the town water laid on.

Slaughter Houses and Meat Inspection.—Most Slaughter Houses are structurally fit, and kept clean. In one case I pointed out to the Inspector faulty levelling of floor, and defective pointing of bricks on the floor, which have since been remedied. I have frequently inspected carcases, and on one occasion had to condemn viscera, my diagnosis of tubercle being confirmed by a microscopical examination by the Clinical Research Association.

Dairies.—I have inspected most of them, and found them in a cleanly and sanitary condition.

Bakehouses.—I have inspected these, and some have been found to have defective roofs and other structural faults, and the owners have been instructed to repair.

Factories and Workshops.—I have inspected nearly all. One large works with very bad sanitary conveniences, and are now erecting large and commodious trough closets.

Offensive Trade.—A gut-scraping workshop has been dealt with. It was first reported upon by Dr. Turton, Dr. Green's *locum tenens*. I have inspected and reported upon it on several occasions, and on one occasion the County Medical Officer of Health accompanied me and reported upon it. The premises abutted upon two public roads, and several provision dealers were in the immediate vicinity. The nuisance was very aggravated, the attempts at abatement very primitive, and the danger to health very grave. As the result of these representations, the manufacturers agreed to give up the trade on these premises on the expiry of the lease in June next. As the nuisance chiefly occurs in the summer months and for other reasons, the Council acquiesced in this arrangement.

Public Mortuary.—It is very important that there should be a mortuary provided for the district. On one occasion the police had great difficulty in securing the sanction of a licence-holder to find accommodation for a body.

Streets.—Park Lane: This is a macadamised road at one part, tailing off into a broad bridle path, then turning at right angles into a rough foot path, forming the district boundary. It is traversed daily by large numbers of workpeople going to and from a large works. It used to be very muddy and impassable in wet weather, so the contents of ash-pits were deposited along the unmade parts of the road. When I first inspected

it, there were decaying vegetables and other garbage mixed with the ashes. I instructed the Inspector to have this removed, and for ashes unmixed with garbage to be put down in future, and this was done. A month or two later comments on the condition of the lane appeared in the local press. I again inspected it, and found none of the statements were correct, that there was no offensive material there, and questioning some of the workmen who use the lane daily, elicited the fact that there was never any offensive smell now, and the lane was quite passable in wet weather, in marked contrast to what used to be.

Nine Elms Lane : This is about to be properly levelled and macadamized.

Dean's Road : This important thoroughfare, the only means of communication between Moseley Village and the rest of the district, is practically only a cart track. I hope its macadamization may not be long delayed.

J. ALFRED CODD,

Medical Officer of Health.

Wolverhampton,

February, 1905.

TABLES.

TABLE I.—Vital Statistics of Whole District during 1904 and previous Years.

Year	Population estimated to Middle of each year	BIRTHS		NETT DEATHS BELONGING TO † THE DISTRICT.				TOTAL DEATHS IN PUBLIC INSTITU- TIONS IN THE DISTRICT	Deaths of Non- residents registered in Public Institu- tions in the District. 10	Deaths of Residents registered in Public Institu- tions beyond the District. 11	TOTAL DEATHS REGISTERED IN THE DISTRICT †	
		Number	Rate*	Under 1 year of age		At all Ages.					Number	Rate*
				Number	Rate per 1000 Births registrd	Number	Rate*					
1	2	3	4	5	6	7	8	9			Number	Rate*
1894	7526	285	37.8	41	143.5	147	19.5		11	136	18.07	
1895	7600	288	37.5	64	222.2	156	20.5		13	143	18.8	
1896	7700	314	40.7	64	203.8	147	19		13	134	17.4	
1897	7800	341	43.7	69	202.3	179	22.9		8	171	21.9	
1898	7900	342	43.8	69	201.8	172	21.7		15	157	19.8	
1899	8000	368	46	79	214.6	201	25		8	193	24	
1900	8500	364	42.8	55	151.1	167	18.4		18	149	17.5	
1901	9488	362	38.1	52	143.6	151	15.9		8	143	15	
1902	9650	405	41.9	55	135.8	162	16		11	152	15.6	
1903 †	9802	381	38.8	45	118.1	127	12.9	28 (‡)	42	152	15.5	
Averages for years 1894-1903	8396.6	345	40.56	59.3	173.25	160.9	18.75			153	17.9	
1904	10437	373	35.7	52 †	139.4 †	172 †	16.5 †	215	205	373 †	33.4 †	

* Rates in Columns 4, 8, and 13 calculated per 1000 of estimated population.

NOTE.—The deaths included in column 7 of this Table are the whole of those registered during the year as having actually occurred within the district or division. The deaths included in Column 7 are the number in column 12, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term “Non-residents” is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there ; and by the term “Residents” is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The “Public Institutions” to be taken into account for the purposes of these Table are those into which persons are habitually received on account sickness or infirmity, such as hospitals, workhouses and asylums. The Institutions in respect of the deaths in which corrections have been made, are referred to in the text.

† The headings of these columns are interchanged for reasons described in the text of the Report.

‡ Woilverhampton Union Workhouse transferred (in part) to this district in August of this year.

Area of District in acres (exclusive of area covered by water)—738.

Total population at all ages	9441	} At Census of 1901
Number of inhabited houses	...	...	1954
Average number of persons per house	...	...	4·8

TABLE III.

Cases of Infectious Disease Notified during
the Year 1904.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.							No. of Cases re- moved to Hospital.
	At all Ages.	At AGES—Years.						
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwards.	
Diphtheria ...	2			1		1		
Erysipelas ...	17	1			7	5	4	
Scarlet Fever ...	59	2	20	31	4	2		17
Enteric Fever ...	12	1	1	4	3	3		2*
Totals ...	90	4	21	36	14	11	4	

Isolation Hospital, Heath Town (Scarlet Fever only).

* Cases admitted to General Hospital, Wolverhampton, since Sept. 1st.

TABLE IV.

Causes of, and Ages at Death, during Year 1904.

CAUSES OF DEATH.	Deaths at the subjoined ages of "Residents" whether occurring in or beyond the District.							Total Deaths, whether of "Residents" or "Non-resi- dents," in Public Institutions in the District.
	All ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	
Small-pox								
Measles	9	2	6	1				
Scarlet Fever	3		3					
Whooping Cough	7	3	4					
Diphtheria and membran- ous croup								
Croup								
Fever { Typhus								
Enteric								1
Other continued								
Epidemic influenza	1						1	3
Cholera								
Plague								
Diarrhœa	18	13	4	1				2
Enteritis	3		2			1		1
Pnerperal fever	1			1				
Erysipelas	1				1			3
Other septic diseases	2						2	4
Phthisis	2					2		12
Other tubercular diseases	9	2	2		1	4		17
Cancer, malignant disease	9					5		11
Bronchitis	7	1	1			3	4	10
Pneumonia... ..	15	5	7	1	1		1	16
Pleurisy	1					1		3
Other diseases of Respira- tory organs	1		1					2
Alcoholism								
Cirrhosis of liver	1					1		2
Venereal diseases... ..								
Premature birth	11	11						4
Diseases and accidents of parturition								
Heart diseases	11	1		1	4	4	1	12
Accidents	2					2		
Suicides	1				1			1
Diseases of Brain and Membranes	27	8	3		1	5	10	17
Diseases of Kidney	2					2		11
Senility	16					4	12	72
Mental diseases								5
All other causes	12	6			2	3	1	6
All causes	172	52	33	6	10	37	34	215

SEE OVER.

NOTES FOR TABLE IV.

NOTES.—(a) In this Table all deaths of “Residents” occurring in public institutions, whether within or without the district are *included* with the other deaths in the columns for the several age groups . . . Deaths of “Non-Residents” occurring in public institutions in the district are in like manner *excluded* from these columns.

(b) See notes on Table 1. as to the meaning of “Residents” and “Non-residents,” and as to the “Public Institutions.”

(c) All deaths occurring in public institutions situated within the district, whether of “Residents” or of “Non-residents,” are, in addition to being dealt with as in Note (a), entered in the last column of this Table. The total number in this column equals the figures for the year in column 9, Table 1.

(d) The total deaths at all ages in column 2 of this Table equals the figures for the year in column 7 of Table 1.

TABLE V.

SUMMARY of SANITARY WORK done in the Inspector of Nuisances Department during the Year 1904, in the Urban District of HEATH TOWN.

				Inspections and Observations made.	Formal Notices by Authority	Nuisances Abated after Notice.
Dwelling Houses and Schools.	{	Foul Conditions	... ..	210	70	50
		Structural Defects	... ..		
		Overcrowding	... ..		
		Unfit for Habitation...	... ..		
		Lodging Houses	... ..	Nil	...	...
		Dairies and Milkshops	...	30	...	...
		Cowsheds	... ..	16	2	2
		Bakehouses	... ..	24	1	1
		Slaughter-houses	... ..	27	1	1
		Canal Boats	... ..	...	...	...
		Ashpits and Privies	... ..	117	50	38
		Deposits of Refuse and Manure		12	4	3
		Water Closets and Waste Water Closets		...	...	...
House Drainage	{	Defective Traps	} Drainage generally	160	40	40
		No Disconnection				
		Other Faults ...				
		Water Supply	... ..	6	1	1
		Pigsties	... ..	50	22	14
		Animals improperly kept	...	...	...	...
		Offensive Trades	... ..	10	1	1
		Smoking Nuisances	... ..	...	...	...
		Other Nuisances	... ..	...	...	...
TOTALS				662	192	151

SUMMARY OF SANITARY WORK DONE.—*continued.*

					Nos.
Seizures of Unwholesome Food	...	...	...	...
Samples of Food taken for Analysis	...	...	...	...
„ „ found Adulterated	...	...	...	...
„ Water taken for Analysis	...	...	...	...	10
„ „ condemned as unfit for use	...	...	...	...	7
Precaution against Infectious Disease.					
Lots of Infectious Bedding stoved or Destroyed	...	...	...	...	6
Houses Disinfected after Infectious Disease	...	...	...	...	55
Schools ditto ditto	...	...	...	...	1
Prosecutions for not Notifying Existence of Infectious Disease					
Convictions ditto ditto	...	...	...	...
Prosecution for Exposure of Infected Persons or things					
Convictions ditto ditto	...	...	...	...

(Signed) E. GRIFFITHS,

*Inspector of Nuisances.**January 26th, 1905.*

TABLE VI.

Factories, Workshops, Laundries, Workplaces, and Homework.

I.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
FACTORIES (Including Factory Laundries...	18		
WORKSHOPS (Including Workshop Laundries)	31		
WORKPLACES...	7		
HOMEWORKERS' PREMISES ...	4		
TOTAL ...	60		

2.—DEFECTS FOUND.

Particulars.	Number of defects.			Number of Prosecutions
	Found.	Remedied.	Referred to H.M. Inspector	
<i>Nuisances under the Public Health Acts :—*</i>				
Want of cleanliness
Want of Ventilation
Overcrowding
Want of drainage of floors
Other nuisances
†Sanitary accommodations {	insufficient ...	...	...	...
	unsuitable or defective ...	...	...	...
	not separate for sexes ...	...	...	...
<i>Offences under the Factory and Workshop Act :—</i>				
Illegal occupation of underground bakehouses (S. 101)
Breach of special sanitary requirements for bakehouses (SS. 97 to 100).
Failure as regard lists of outworkers (S. 107
Giving out work to be done in { unwholesome (S. 108)
premises which are { infected (S. 110)
Allowing wearing apparel to be made in premises infected by scarlet fever or smallpox (S. 109).
Other offences
Total

* Including those specified in Sections 2, 3, 7 and 8, of the Factory Act as remediable under the Public Health Acts.

† For districts not in London state here whether Section 22 of the Public Health Acts Amendment Act, 1890, has been adopted by the District Council ; and if so what standard of sufficiency and suitability of sanitary accommodation for persons employed in factories and workshops has been enforced.

3.—OTHER MATTERS.

Class.		Number.	
Matters notified to H.M. Inspectors of Factories :—			
Failure to affix Abstract of the Factory Workshop Act (S. 133)	...	...	...
Action taken in matters referred by H.M. Inspectors { Notified by H.M. Inspector	...	...	...
as remediable under the Public Health Act, but { Reports (of action taken) sent to H.M.	...	...	...
not under the Factory Act (S. 5)	...	...	...
Other	...	...	...
Underground Bakehouses (S. 101) :—			
In use during 1903	...	...	...
Certificates granted { in 1903	...	...	...
{ in 1904	...	...	...
In use at the end of 1904	...	...	...
Homework :—			
Lists of Outworkers* (S. 107) :—			
Lists received	...	...	4
Addresses of outworkers	...	...	4
{ forwarded to other authorities		...	...
{ received from other Authorities		...	...
Homework in unwholesome or infected premises :—			
Notices prohibiting homework in unwholesome premises (S. 108)	...	...	...
Cases of infectious disease notified in homeworkers' premises	...	...	...
Orders prohibiting homework in infected premises (S. 110)	...	...	...
Workshops on the Register (S. 131) at the end of 1904.			
Important classes of workshops, such as workshop bake-houses, may be enumerated here.	Factories with power	...	9
	Workshops, including Bakehouses	...	31
	Workplaces	...	7
	Homeworkers' premises	...	4
	Total number of workshops on Register	...	51